

Amendments to the Claims:

1. (Currently Amended) A system comprising:

~~a terminal capable of communicating an apparatus programmed to communicate or facilitate communication~~ at least one of within and/or across at least one network, wherein the ~~terminal apparatus~~ is included within an organization including a plurality of ~~terminals apparatuses~~, at least one ~~terminal apparatus~~ having at least one characteristic and being at at least one of a plurality of positions within the organization;

a secondary certification authority (CA) ~~capable of providing processor programmed to provide~~ at least one role certificate to the ~~terminal apparatus~~ based upon the at least one position of the ~~terminal apparatus~~ within the organization, wherein the organization includes a plurality of secondary CA's ~~capable of issuing CA processors programmed to issue~~ at least one role certificate to respective groups of ~~terminals apparatuses~~ of the organization;

a tertiary CA ~~capable of providing processor programmed to provide~~ at least one permission certificate to the ~~terminal apparatus~~ based upon the at least one characteristic of the ~~terminal apparatus~~ that is located at a position within the organization, wherein the organization includes a plurality of tertiary CA's ~~capable of issuing CA processors programmed to issue~~ at least one permission certificate to respective sub-groups of ~~terminals apparatuses~~ of the organization; and

a server ~~capable of authenticating programmed to authenticate the terminal apparatus~~ based upon an identity certificate, the at least one role certificate and the at least one permission certificate of the ~~terminal apparatus~~ to thereby determine whether to grant the ~~terminal apparatus~~ access to at least one resource of the server.

2. (Currently Amended) A system according to Claim 1, wherein the ~~terminal apparatus~~ comprises a ~~terminal apparatus~~ included within an organization comprising a customer base of a cellular service provider that includes a plurality of ~~terminals apparatuses~~, each ~~terminal apparatus~~ being at one of a plurality of positions comprising a plurality of service plans offered by the cellular network operator, and wherein at least one ~~terminal apparatus~~ has at least

one characteristic comprising at least one optional service offered by the cellular network operator.

3. (Currently Amended) A system according to Claim 1, wherein the ~~terminal~~ apparatus comprises a ~~terminal-apparatus~~ included within an organization comprising a customer base of a cellular service provider that includes a plurality of ~~terminals~~ apparatuses, each ~~terminal-apparatus~~ being at at least one of a plurality of positions comprising a plurality of services offered by the cellular network operator, and wherein at least one ~~terminal-apparatus~~ has at least one characteristic comprising at least one optional service offered by the cellular network operator.

4. (Currently Amended) A system according to Claim 1, wherein the tertiary CA processor is ~~capable of providing programmed to provide~~ at least one permission certificate each having an associated validity time no greater than a validity time of the at least one role certificate provided by the secondary CA processor, and no greater than a validity time of the identity certificate.

5. (Currently Amended) A system according to Claim 4, wherein the server is ~~capable of authenticating programmed to authenticate~~ the ~~terminal-apparatus~~ based upon the validity times of the identity certificate, at least one role certificate and at least one permission certificate of the respective ~~terminal~~ apparatus.

6. (Currently Amended) A system according to Claim 1, wherein the ~~terminal~~ apparatus is ~~capable of requesting programmed to request~~ access to at least one resource of a server before the server authenticates the ~~terminal~~ apparatus, and wherein the server is ~~capable of granting programmed to grant~~ access to the at least one resource if the ~~terminal-apparatus~~ is authenticated.

7. (Currently Amended) A method of authenticating a ~~terminal-apparatus~~ comprising:

providing a ~~terminal-capable of communicating an apparatus programmed to communicate or facilitate communication~~ at least one of within and/or across at least one network, wherein the ~~terminal-apparatus~~ is included within an organization including a plurality of ~~terminals apparatuses~~, at least one ~~terminal-apparatus~~ having at least one characteristic and being at at least one of a plurality of positions within the organization;

providing at least one role certificate to the ~~terminal-apparatus~~ from a secondary certification authority (CA) ~~processor~~ based upon the at least one position of the ~~terminal apparatus~~ within the organization, wherein the organization includes a plurality of secondary CA's ~~capable of issuing CA processors programmed to issue~~ at least one role certificate to respective groups of ~~terminals-apparatuses~~ of the organization;

providing at least one permission certificate to the ~~terminal-apparatus~~ from a tertiary CA ~~processor~~ based upon the at least one characteristic of the ~~terminal-apparatus~~ located at a position within the organization, wherein the organization includes a plurality of tertiary CA's ~~capable of issuing CA processors programmed to issue~~ at least one permission certificate to respective sub-groups of ~~terminals-apparatuses~~ of the organization; and

authenticating the ~~terminal-apparatus~~ at a server based upon an identity certificate, the at least one role certificate and the at least one permission certificate of the ~~terminal-apparatus~~ to thereby determine whether to grant the ~~terminal-apparatus~~ access to at least one resource of the server.

8. (Currently Amended) A method according to Claim 7, wherein providing a ~~terminal-apparatus~~ comprises providing a ~~terminal-apparatus~~ included within an organization comprising a customer base of a cellular service provider that includes a plurality of ~~terminals apparatuses~~, each ~~terminal-apparatus~~ being at one of a plurality of positions comprising a plurality of service plans offered by the cellular network operator, and wherein at least one ~~terminal-apparatus~~ has at least one characteristic comprising at least one optional service offered by the cellular network operator.

9. (Currently Amended) A method according to Claim 7, wherein providing a ~~terminal-apparatus~~ comprises providing a ~~terminal-apparatus~~ included within an organization comprising a customer base of a cellular service provider that includes a plurality of ~~terminals apparatuses~~, each ~~terminal-apparatus~~ being at at least one of a plurality of positions comprising a plurality of services offered by the cellular network operator, and wherein at least one ~~terminal apparatus~~ has at least one characteristic comprising at least one optional service offered by the cellular network operator.

10. (Original) A method according to Claim 7, wherein providing at least one permission certificate comprises providing at least one permission certificate each having an associated validity time no greater than a validity time of the at least one role certificate, and no greater than a validity time of the identity certificate.

11. (Currently Amended) A method according to Claim 10, wherein authenticating the ~~terminal-apparatus~~ comprises authenticating the ~~terminal-apparatus~~ based upon the validity times of the identity certificate, at least one role certificate and at least one permission certificate of the respective ~~terminal apparatus~~.

12. (Currently Amended) A method according to Claim 7 further comprising:
requesting, from the ~~terminal apparatus~~, access to at least one resource of a server before authenticating the ~~terminal apparatus~~; and
granting access to the at least one resource if the ~~terminal-apparatus~~ is authenticated.

13. (Currently Amended) ~~A terminal-~~ An apparatus included within an organization including a plurality of ~~terminals apparatuses~~, each ~~terminal-apparatus~~ having at least one characteristic and being at at least one of a plurality of positions within the organization, the ~~terminal-apparatus~~ comprising:

~~a controller capable of communicating~~ programmed to communicate or facilitate communication at least one of within ~~and or~~ across at least one network, wherein the controller is ~~capable of obtaining~~ programmed to obtain at least one role certificate from a secondary certification authority (CA) ~~processor~~ based upon the at least one position of the ~~terminal apparatus~~ within the organization and at least one permission certificate from a tertiary CA ~~processor~~ based upon the at least one characteristic of the ~~terminal apparatus~~ that is located at a position within the organization, wherein the organization includes a plurality of secondary CA's ~~capable of issuing CA processors~~ programmed to issue at least one role certificate to respective groups of ~~terminals apparatuses~~ of the organization, and wherein the organization includes a plurality of tertiary CA's ~~capable of issuing CA processors~~ programmed to issue at least one permission certificate to respective sub-groups of ~~terminals apparatuses~~ of the organization; ~~and~~

~~a memory capable of storing an identity certificate, at least one role certificate and at least one permission certificate,~~

wherein the controller is also ~~capable of communicating~~ programmed to communicate or facilitate communication with a server ~~such that to thereby enable the server is capable of authenticating to authenticate the terminal apparatus based upon the an identity certificate, the at least one role certificate and the at least one permission certificate of the terminal apparatus to thereby determine whether to grant the terminal apparatus access to at least one resource of the server.~~

14. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 13, wherein the controller is ~~capable of obtaining~~ programmed to obtain at least one role certificate from a secondary CA ~~capable of issuing~~ processor programmed to issue at least one role certificate to each ~~terminal apparatus~~ of the organization comprising a customer base of a cellular service provider that includes a plurality of ~~terminals apparatuses~~, each ~~terminal apparatus~~ being at one of a plurality of positions comprising a plurality of service plans offered by the cellular network operator, and wherein the controller is ~~capable of obtaining~~ programmed to obtain at least one permission certificate based upon at least one characteristic comprising at least one optional service offered by the cellular network operator.

15. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 13, wherein the controller is ~~capable of obtaining~~ programmed to obtain at least one role certificate from a secondary CA ~~capable of issuing~~ processor programmed to issue at least one role certificate to each ~~terminal apparatus~~ of the organization comprising a customer base of a cellular service provider that includes a plurality of ~~terminals~~ apparatuses, each ~~terminal apparatus~~ being at at least one of a plurality of positions comprising a plurality of services offered by the cellular network operator, and wherein the controller is ~~capable of obtaining~~ programmed to obtain at least one permission certificate based upon at least one characteristic comprising at least one optional service offered by the cellular network operator.

16. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 13, wherein the controller is ~~capable of obtaining~~ programmed to obtain at least one permission certificate each having an associated validity time no greater than a validity time of the at least one role certificate obtained by the controller, and no greater than a validity time of the identity certificate.

17. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 16, wherein the controller is also ~~capable of communicating~~ programmed to communicate or facilitate communication with a server such that the server is ~~capable of authenticating~~ programmed to authenticate the ~~terminal apparatus~~ based upon the validity times of the identity certificate, at least one role certificate and at least one permission certificate of the respective ~~terminal apparatus~~.

18. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 13, wherein the controller is ~~capable of requesting~~ programmed to request access to at least one resource of a server before the server authenticates the ~~terminal apparatus~~ such that the server is ~~capable of granting~~ programmed to grant access to the at least one resource if the ~~terminal apparatus~~ is authenticated.